telecommunication system" (stating that Fig. 1 shows a base communication system with two antennas 170 and 180 connected to two transceivers 150 and 160 for receiving/transmitting at least two signals).

Applicants respectfully traverse the aforementioned assertion in the grounds of rejection. In particular, Figure 1 of Pelin et al. shows base station 110 that includes traffic channel transceiver 150 and control channel transceiver 160. Traffic channel transceiver 150 handles a plurality of traffic signals, while control channel transceiver 160 is used for control purposes such as broadcasting control information to "mobiles" (see col. 4, lines 54-63). Because of the different use, types of signals handled, and functions of these two transceivers, one of ordinary skill in the art would not consider that the signals that are received at the traffic channel transceiver 150 and the control channel transceiver 160 would be combined.

Next, the grounds of rejection acknowledge that Pelin et al. does not provide two distinct algorithms (differing as claimed). In this case, the grounds of rejection turn to the teachings of Benveniste. In particular, the grounds of rejection state that Benveniste teaches this limitation "as within the mixed power control technique, the combining of received signals is performed and by using different algorithms, the mixed and result[*sic*] combined signal is produced for signal quality achievement." The grounds of rejection cite col. 2, lines 39-53 and col. 3, lines 38-51 for signal quality addressed; and col. 5, lines 1-17, col. 19, lines 38-47, and col. 23, line 60 to col. 24, line 41 for combining different algorithms.

Turning to Benveniste, Applicants respectfully submit that the algorithms that are disclosed therein are for an entirely different purpose than for processing signals such as they are used in the present invention. Rather, the algorithms are channel assignment algorithms (see col.

19, lines 16 and 39). Benveniste relates to a problem of improving the quality of communications in a wireless system by optimizing the ratio of the received signal to interference (see col. 3, lines 38-51). To do this, channel interference is reduced, by for example, avoiding neighbor channels within a cell (see col. 2, lines 54-61). Several methods of managing neighbor-channel interference are disclosed, such as the one cited by the Examiner at cols. 23 and 24 (MPCDA). The algorithm used for MPCDA is used to define the optimum way to manage a situation of decreasing neighbor cell-distance with increased user-to-base distance. That is, the algorithm used to assign channels for a call is based on assignment of users in the cell with respect to their distance from the serving base station. As such, since the algorithms of Benveniste are used in a completely different manner than the claimed algorithms, one of one of ordinary skill in the art would not turn to Benveniste for its teachings. Therefore, Applicants submit that claim 1 is allowable, as well as independent claims 6, 7, and 9 which include the "differing algorithms" feature.

For similar reasons, since the algorithms disclosed in Benveniste are not relevant to combining signals, the combination of Pelin et al. and Benveniste would not suggest the feature of "processing the plurality of signals with a plurality of algorithms based on the condition of the signals" as recited in independent claim 8.

With respect to dependent claims 2-5, the grounds of rejection provide the same argument as provided in the March 30, 2004 Office Action. Applicants respectfully traverse these rejections for the reasons that follow.

Claim 2 recites that the quality of the two resulting signals is estimated. The grounds of rejection allege that this is disclosed or suggested in col. 2, lines 22-40 of Pelin et al. "as the

quality of transmitted signals taken into accounts for (*sic*) DWILSP algorithm to evaluate." However, as described in Pelin et al., the "quality" that the grounds of rejection refer to is the quality of the received signal (received input) and not that of a "resulting signal" - that is, the quality of the signal after processing by the algorithm. As such, Applicants respectfully submit that claim 2 is allowable for this reason as well.

Claim 3 is allowable based on its dependency on claims 1/2 for the reasons discussed above as well as for its own features. As for claim 3, the grounds of rejection state that Pelin et al. further teach that "the estimated quality of the two resulting signals is used to weight the combination of the two resulting signals" (citing col. 2, lines 22-40 as the decoupled weighted least squares with projections (DWILSP) algorithm and the iterative least squares with projections (ILSP) algorithm is used for weighting the combination of the resulting signals (citing col. 2, lines 22-40 for a conventional technique and as well as disclosed in Fig. 11, col. 13, line 54 to col. 14, line 33). First, Applicants submit that neither of these sections suggest weighting the combination of the two resulting signals. The grounds of rejection citation to Figure 11 shows an embodiment using DWILSP 1120 as the combiner (similar to items 820 and 920 of Figures 8 and 9, respectively). As such, the EST blocks of Figure 11 would not be suggestive of a quality after processing by the algorithm since they are logically (as shown) before the algorithm and not after. As such, claim 3 is allowable for this reason as well.

As for claim 4, the grounds of rejection allege that Pelin et al. disclose "wherein one of the two algorithm is a temporal reference algorithm and the other one of the two algorithm is a spatial reference algorithm" (citing col. 11, lines 2-28 as spatial and temporal algorithm being used). Applicants again submit that Pelin et al. does not disclose or suggest an embodiment

having two differing algorithms together, and thus, the general suggestion of different algorithms being disclosed in Pelin et al. is not enough to support the rejection. Further, the grounds of rejection of claim 4 now stand contradictory to the statement provided on page 3 of the Office Action wherein Benveniste is used to make up for the lack of teaching of two algorithms in Pelin et al. Benveniste is not mentioned in the rejection with respect to claim 4.

With respect to claim 5, the grounds of rejection state that Pelin further discloses "wherein more than two algorithms is used", (citing Figs. 9-11, and col. 5, line 30 to col. 7, line 19). However, claim 5 recites that more than two *differing* algorithms are used. As such, Applicants submit that claim 5 is allowable for this reason as well.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

Ronald Kimble
Registration No. 44,186

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

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